City of Waycross Solid Waste Management Plan Update 2008

Plan Prepared by: City of Waycross Department of Community Improvement PO Drawer 99 Waycross, GA 31502

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I. PLANNING PROCESS AND PURPOSE

The City of Waycross Solid Waste Management Plan (SWMP) was prepared in order to meet the requirements of the Official Code of Georgia, Annotated, Section 12-8-20 et seq., also known as the Georgia Comprehensive Solid Waste Management Act. The SWMP provides local governments and citizens of the City of Waycross an opportunity to ensure future solid waste management needs are anticipated and appropriately planned for. It has been prepared in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management set forth by the Georgia Department of Community Affairs.

The first section of the Plan includes a waste stream analysis along with a study of the categories of solid waste produced by the City of Waycross community. This section categorizes waste generation sectors (residential, commercial, etc.) and how much waste is collected and disposed of from each sector. The second section describes ongoing and needed waste reduction, collection, and disposal activities. The third section evaluates the community's land limitation areas for future location of waste management facilities and reviews the ongoing and needed educational and public involvement activities. Finally, the plan recommends an implementation strategy to achieve the goals and objectives for effective solid waste management.

The Solid Waste Management Act requires that this Plan incorporates:

- Plans for the solid waste needs of the City of Waycross community for the next ten years;
- o Identifies the solid waste handling facilities;
- o Identifies areas where a solid waste facility may not be suitable given characteristics of the environment.

II. PLANNING JURISDICTION

The City of Waycross is located in central southeast Georgia and is located in the county of Ware, the largest county in terms of land area within the State of Georgia. The City of Waycross has a land area of 7,488 acres, or 11.7 square miles. The total 2000 Census population was 15,333 persons. Table 1 shows the historic and projected population growth for the City of Waycross.

According to the 2000 Census, there were 7,516 housing units in the City of Waycross. By the year 2030, the City of Waycross is expected to have a decrease in housing units to 7,294 units. This represents a decrease of 2.95% of total housing units. The physical landscape of the City of Waycross is consistent throughout the City with no outstanding physical features and being flat in topography.

TABLE 1: HISTORIC POPULATION GROWTH AND PROJECTIONS

	Beginning Population 1980	Population 2000	Estimated Population 2010	Estimated Population 2020	Estimated Population 2030	Projected 10-year Growth 2000- 2010	Projected 10-year Growth 2010- 2020	Projected 10-year Growth 2020- 2030
City of Wayeross	•	15,333	13,314	11,295	9,276	-14%	-15%	-18%

Source: Data Set from www.georgiaplanning.com with original source from U.S. Bureau of the Census (SF1)

TABLE 2: EMPLOYMENT BY OCCUPATION (2000)

	1980	1990	2000	% Change
				1980-2000
Total Jobs	6,799	5,747	5,490	-19%
Agriculture, Forestry, Fishing, Hunting, and Mining	148	78	92	-38%
Construction	357	268	277	-22%
Manufacturing	1,026	1,062	1,067	4%
Wholesale Trade	271	211	114	-28%
Retail Trade	1,316	1,155	612	-54%
Transportation, Warehousing and Utilities	946	528	318	-66%
Information	n/a	n/a	70	n/a
Finance, Insurance, and Real Estate	247	317	118	-52%
Professional, Scientific, Management, Administrative, and Waste Management Services	151	177	301	100%
Educational, health, and social services	1,249	1,017	1,310	5%
Arts, entertainment, recreation, accommodation, and food services	390	73	530	36%
Other Services	336	481	268	-20%
Public Administration	362	380	413	14%

Source: Data Set from www.georgiaplanning.com with original source from U.S. Bureau of the Census (SF1)

III. WASTE DISPOSAL STREAM ANALYSIS

As of March, 2008, the City of Waycross currently serves 6,385 customers with trash pickup. The trash is picked up through a contract with Southland Waste Systems and transferred Broadhurst Landfill in Screven, Georgia. In 2007, the City of Waycross served 6,457 customers and Southland Waste collected 6,799 tons of waste from those customers. This equates to 2.43 lbs of waste generated per citizen per day in the City of Waycross using the numbers from the 2000 Census of 15,333 persons as evidenced through Table 3.

TABLE 3: 2007 MUNICIPAL SOLID WASTE COLLECTED IN THE CITY OF WAYCROSS

Amount
WHITOURIE
of
Waste
Per
Person
2007
2.43

Table 4 shows the amount of Municipal Solid Waste that was collected in the City of Waycross during the years of 2003-2007. These numbers were provided from Southland Waste to the City of Waycross. These are only the amounts of waste collected within the incorporated city limits for the City of Waycross for both residential and commercial customers.

TABLE 4: MUNICIPAL SOLID WASTE COLLECTED 2003-2007 (TONS)

	2003	2004	2005	2006	2007
City of Wayeross	6,353	6,409	6,412	6,640	6,799

Table 5, shown below, demonstrates that with the population remaining stagnate with 15,333, the 2000 U.S. Census population number for the City of Waycross, that the amount of Municipal Solid Waste is increasing on a per person basis within the City.

TABLE 5: MUNICIPAL SOLID WASTE CREATED PER PERSON 2003-2007

	# of Customers for Trash Pickup	Total Tons Per Year	Amount of Daily Trash Per Citizen (lbs)
2003	6,604	6,353	2.27
2004	6,487	6,409	2.29
2005	6,490	6,412	2.29
2006	6,548	6,639	2.37
2007	6,385	6,799	2.43

Table 5 shows that the residents of the City of Waycross, if the number remains constant at 15,333, generate more trash per person each year from 2003-2007. If the numbers are used from the estimates for the period from 2000-2010 where the population for the City of Waycross is shown to see estimated decrease in population of over 2,000 people, the amount of waste per person would grow at an alarming rate.

Now that it has been determined the amount of Municipal Solid Waste created per person in the City of Waycross over the last five (5) years, it is essential to determine what types of waste are created. In 2005, R.W. Beck conducted a waste characterization study at the Broadhurst landfill in Wayne County, Georgia. This study was done on behalf of the Southeast Georgia Regional Development Center for the RDC's nine (9) county region. The waste stream analysis conducted by R.W. Beck is assumed to be similar enough to that of the City of Waycross to be useful in the planning process. A full copy of this study is included in this plan under the title of "Appendix A."

The results of the waste characterization study from RW Beck shows that the waste disposed of within the landfill consists of 35.3% Paper Products, 33.1% Organic, 14.5% Plastic, 5.3% Metal, 4.8 % C&D, 3.6% Inorganic, and 3.3% Glass. Table 6 takes the amount of the MSW collected in the City of Waycross from the years of 2003-2007 and breaks down the percentages to show the detailed numbers of types and amounts of waste produced during those years. These amounts were the same as the ones reported by Southland Waste Systems and are calculated using the characterization study amounts of RW Beck. Bearing the same assumption that the City of Waycross disposal amounts are comparable with the numbers from the Broadhurst Landfill, local officials will need to prioritize targeting reductions of the (1) paper/paperboard; (2) Plastics, and (3) other recyclable materials.

TABLE 6: MUNICIPAL SOLID WASTE COMPOSITION 2003-2007

	Total Tons Per Year	Paper (tons)	Organic (tons)	Plastic (tons)	Metal (tons)	C&D (tons)	Inorganic (tons)	Glass (tons)
2003	6,353	2,243	2,102	921	337	304	229	209
2004	6,409	2,262	2,121	929	340	308	231	211
2005	6,412	2,263	2,122	929	341	308	231	211
2006	6,639	2,344	2,198	963	352	319	239	219
2007	6,799	2,400	2,251	986	360	326	245	224
2008	6,888	2,432	2,279	999	365	331	248	227
2009	6,977	2,463	2,310	1,012	370	335	251	230
2010	7,067	2,495	2,339	1,025	375	339	254	233
2011	7,156	2,526	2,369	1,038	379	343	258	236
2012	7,245	2,558	2,398	1,051	384	348	261	239
2013	7,334	2,589	2,428	1,064	389	352	264	242
2014	7,423	2,62	2,457	1,076	393	356	267	245
2015	7,513	2,652	2,487	1,089	398	361	270	248
2016	7,602	2,683	2,516	1,102	403	365	274	251
2017	7,691	2,715	2,546	1,115	408	369	277	254
2018	7.780	2.746	2.575	1,128	412	373	280	257

Numbers for 2008-2018 are estimated based upon average increase of 89 new customers per year and using numbers from RW Beck for % of waste stream analysis

Needs and Goals

The City of Waycross, with numbers a listed in the table above, will need to begin implementing both an education strategy and program to better involve the public concerning the issues concerning a benefit to recycle. In addition, the City needs to work with other public agencies to develop a campaign to increase the importance of compositing organic materials that can be reused and replenish the soil as they constitute some 33% of waste from the City of Waycross.

IV. WASTE REDUCTION

There are currently no mandated waste reduction plans that exist within the City of Waycross. In addition, there are also no mandated plans that exist within the whole area of Ware County. In an effort to further reduce the amount of MSW, the local officials are encouraged to increase the amount of recycling efforts that are undertaken.

Currently, the City of Waycross does not offer recycling collection, but there is a recycling center operated by the City of Waycross located at:

City of Waycross Recycling Center 1708 Riverside Avenue Waycross, GA 31501

This recycling center is operated by the City of Waycross and is the only one located within the incorporated limits of Waycross. The center is operated three days a week: Monday, Wednesday, and Friday, from the hours of 8:30am to 1:30pm. Unfortunately, there are no statistics for the amount of recyclable waste that is collected at the center. The materials that are accepted from this recycling center are aluminum cans, mixed paper, steel cans (i.e. soup can, vegetable cans), newspapers and magazines, and cardboard. Please see "Appendix B" for the public flyer.

Within the City of Waycross, there are many businesses that have cardboard collection areas for recycling but it is not something that is mandatory for businesses in the City. The major need and goal for the City of Waycross is that recycling efforts must be increased and public perception continue. As the population for the City is projected to decrease and the amount of MSW increasing, the only way to continue and prepare for any sort of growth in the City is to promote and encourage recycling from city residents and businesses. The City intends to attempted a waste reduction goal of 25% and while not immediately being able to reduce the amount of waste generated in the City of Waycross, recycling efforts can lead the City of Waycross towards that goal.

In the time that is leading towards the next update of the Solid Waste Management Plan, due in 2011, the City of Waycross intends to begin tracking more accurately the amount of recycled waste delivered to the recycling center so that the reduction rate can be accurately determined. There is also a possibility where the City of Waycross will obtain funding through grant projects to expand and further promote recycling efforts. Also, the City must increase their efforts to let the customers know of the yard trimming pickups, special collections that the Department of Public Works provides, as well special trash days, usually on a Saturday at a location within the City to pick up items that are normally not picked up with any other program offered by the City.

Source Reduction Programs

At this time, there are no source reduction programs within the City of Waycross.

Composting Programs

At this time, there are no composting programs within the City of Waycross.

Yard Trimmings Collection Program

The City of Waycross Public Works Department collects yard trimmings from the residential units on a twice a month basis at no additional charge to the garbage customer, including in fee which is included in the water bill.

Needs and Goals

All City of Waycross residents must be made aware of the results of this update of the plan where the amount of waste has seen a consistent rise over the last five years while the number of garbage customers has declined and this trend is showing no signs of reversing its trend. Another way to meet this goal would be to expand the scope of efforts at the Recycling Center and allow for more hours, possibly during the weekend, and partner with other agencies to increase the types of goods that can be taken for recycling to this location.

V. COLLECTION

a) Collection Practices

All waste in the City of Waycross is picked up on a one day a week pickup by Southland Waste Systems and transported to their transfer station at the Waycross-Ware County Industrial Park. Southland Waste collects and disposes of household waste. The waste is taken from the transfer station to Broadhurst Landfill on Screven, Wayne County, Georgia.

The curbside collection within the City of Waycross is required for all residential and commercial uses within the City. It is illegal for anyone to live in a home without water and power. With water service, the garbage fee is included so that each and every water customer is a garbage customer as well. Unlike within the unincorporated areas of Ware County where residents have the ability to take their garbage to Southland Waste, you are required to have the garbage pickup if you are a water customer.

As within most cities, there are times where problems of illegal dumping occur and it will become a hazard, nuisance, and blight. The City of Waycross employs two staff persons, Mr. Caleb Lancaster and Mr. Richard Love, who investigate and prosecute in municipal court those offenders who violate local ordinances.

The only municipal waste collector within the City of Waycross is Southland Waste, which can be contacted at:

Southland Waste 3473 Harris Road Waycross, Georgia 31503 Sam Sullivan, General Manager (912) 284-1222

The City of Waycross will continue to fully and aggressively target illegal dumping offenders within the City and progress efforts to beautify areas for current and future residents of the City.

b) Contingency Collection Strategy

In the event that there is ever an event to cause a service disruption to take place within the City of Waycross and debris needs to be picked up immediately, there is not currently a contingency strategy for that in place. However, the Ware County Emergency Management Agency is in the process of developing a county wide, which will include the City of Waycross, contingency plan. There is no date available for when this plan will be implemented and until this is complete, the City of Waycross will follow the following procedure:

If the primary waste collection program in the City of Waycross becomes interrupted due to an unforeseen event, the City will either: 1) contact and contract with a different private collection; 2) contact and contract with a nearby city or county to provide collection services for the City; 3) lease or rent a collection vehicle and begin a temporary City managed curbside collection program and hauling service. The City will maintain a list of private collectors who are available on a contingency basis and they maintain a list of those vendors who rent, lease, or sell collection vehicles. This list is to be updated annually.

Disaster Debris Management

In cases where debris is caused by a storm, or other natural calamity, the public will be notified through all means available. If the cable service is not disrupted, then local access Channel 42 will be used through slides informing the public what will take place, the City of Waycross website will be constantly updated with pertinent information, use of the local organ will be used as effectively as possible, and flyers may be generated and disseminated as needed by City personnel.

Needs and Goals

There is a need during the next ten years to begin to research the possibility of the inclusion of a landfill within the City of Waycross. This will include working with agencies and the public as it will affect all. In addition, the City of Waycross will strive to have at hand a more detailed contingency plan specific to the needs of the City customers in the event the City must begin collection practices again. This plan will include methods for information dissemination, as well as a detailed route strategy for day pickups.

VI. DISPOSAL

All of the solid waste collected in the City of Waycross is taken to the Southland Waste Transfer Station, weighed and then taken to the Broadhurst Landfill. There are currently no landfills located in Waycross or Ware County that are operable, according to the Georgia Environmental Protection Division.

The disposal needs of the City of Waycross are handled by Southland Waste, Inc. for curbside collection and operation of the transfer station. Once the waste leaves the transfer station, it is taken to the Broadhurst Landfill (Georgia EPD Permit #151-014D (SL)). According to the Landfill Assurance letter, "Appendix C," maintaining the 47,090 tons disposed of from the City of Waycross at the Landfill, the landfill will not exceed capacity at any point from the years of 2008-2018.

However, if the NAMCO company is successful in reviving a former Tri-County Landfill Project to get a permit, it will be able to be used by City residents for disposal of Construction and Demolition garbage and certain types commercial/industrial waste, which will be determined through contracts prior to commencement of operation.

As mentioned in Section V of this plan, the Ware County EMA is currently in process of compiling a response plan to deal with emergency solid waste disposal in the event of any type of catastrophe. Any action of the local EMA would be determined by the extent of the catastrophe and additional resources would be provided through the Georgia Emergency Management Agency if request by the local authority. Given the proximity to the coastal region and varying climate changes, the City of Waycross faces the possibility of hurricanes, tornadoes, and flash flooding. A majority of the anticipated waste that would need to be disposed of in this type of event would be construction and demolition waste. Of course, if operable, the ideal location of this waste drop off point would be the Tri County Landfill site. If this is not an option, the next available location would be landfills in either Wayne or Atkinson Counties.

Contingency Disposal Strategy

The City has identified several alternatives for solid waste disposal in the event existing arrangements need to be modified. To ensure continued waste disposal the City will contact other disposal facilities and make arrangements in sufficient time to meet the demands of disposal. The City has adequately prepared and has the capability of ensuring that municipal solid waste can be disposed of for the next ten (10) years.

If necessary to utilize another landfill this option can be used immediately, within 24-48 hours, after the facility has been contacted. Southland Waste is the primary hauler of waste in the City of Waycross. The main landfill used by Southland Waste is the Broadhurst Landfill in Screven, Georgia. Should a natural disaster or other event cause this landfill to be unusable, Southland Waste would then use the closest available landfill as a secondary location during the interim period.

Needs and Goals

The City of Waycross will need to continue to coordinate efforts with Ware County, Ware County EMA, and through applicable City departments to ensure that there is a functional plan able to be brought online in the quickest of time frames in the event that there is disruption the disposal services.

VII. LAND LIMITATION

The amount of land that is available within the incorporated City Limits of Waycross for any type of recycling, recovery, composting or solid waste disposal facilities is very much limited. This is due to the City's residential and commercial growth occurring within the same limits for numerous years. The City has become landlocked in terms of the entirety of it being surrounded by the unincorporated areas of Ware County.

Based upon the heaving zoning and land restrictions, it is extremely unlikely that any form of waste disposal or treatment facility would be economically viable in Waycross. However, there is always the ability for any municipality to annex property that is bordering any part of the City boundaries. There is no intent for this to take place but would be one of the few ways that the City of Waycross could implement a solid waste handling facility with the capacity to handle the amount of waste produced within the City. In addition, a tract of land to be used for any such solid waste handling facility would likely be located in the immediate area of residential living. There are several land limitation categories to examine when locating a solid waste handling facility:

- 1) Water supply Watershed: DNR Rule 391-3-16-.01 (7)(c)(1) requires that at any location within a small water supply watershed, new solid waste landfills must have synthetic liners and leachate collection systems. There are no watersheds requiring this attention,
- 2) Groundwater Recharge Areas: DNR Rule 391-3-16-.02(3)(a) requires that in significant groundwater recharge areas, DNR shall not issue permits for new solid waste landfills not having synthetic liners and leachate collection systems. There are no areas requiring this attention in Waycross
- 3) Wetlands: DNR Rule 391-3-16-.03(3)(e) establishes that solid waste landfills may constitute an unacceptable use of a wetland. There are no wetlands to be affected currently in the City of Waycross,
- 4) <u>River Corridors</u>: DNR Rule 391-13-16-.04(4)(h)(1) prohibits the development of new solid waste landfills within protected river corridors. There are no areas along the Satilla River suitable enough to be affected along this requirements,
- 5) <u>Protected Mountains</u>: DNR Rule 391-3-16-.05 (4)(1) DNR rule prohibits the development of new solid waste landfills in areas designated as protected mountains. There are no mountains located in Waycross.
- 6) Zoning: Per DNR Rule 391-3-4-.15(1)(a) the location must be applied in accordance with local zoning law. The City of Waycross Zoning Map will address this issue in Appendix "D"
- 7) <u>Airport Safety</u>: DNR Rule 391-3-4-.05(1)(c) sets distance from airport requirements for any facility. There is no airport located within the corporate limits of the City of Waycross.
- 8) Flood Plain: DNR Rule 391-3-4-.05(1)(d) details the restrictions for building within the 100 year flood plain. If a location were to be located in this type of area within the City of Waycross, flood elevations would be raised at site and flow of the floodplain not be restricted.

- 9) Fault Areas and Seismic Impact Zones: DNR Rules 391-3-4-.05(1)(f) &(g) regulates development of any landfill within these types of areas. There are neither fault areas or seismic impact zones within the City of Waycross.
- 10) <u>Unstable Areas:</u> DNR Rule 391-3-4.05(1)(h) sets requirements for engineering areas in those areas that demonstrate unstable factors when locating a landfill on those sites. The City of Waycross Engineering department would require information on ground conditions and perform subsequent testing measures in this case.
- 11) Significant Groundwater Recharge Areas: DNR Rule 391-3-4-.05(1)(j) requires new solid waste landfills or expansions of existing facilities within two miles of a significant groundwater recharge areas to have liners and leachate collection systems. Not applicable to the City of Waycross when locating a potential landfill.

The City of Waycross also addresses the requirements for each of these districts in the City of Waycross Zoning Ordinance Section 716, which is attached as Appendix "D."

In the event that there is any future disposal and/or treatment facilities located in the City of Waycross the City would need to ensure that they are located in such areas where they conform to the correct zoning and environmental locations in coordination with the Criteria for Siting regulations of the Georgia Department of Community Affairs. The City of Waycross Zoning Map is attached as "Appendix E."

In the event that there becomes a viable facility as previously mentioned, the City of Waycross will adhere to the following criteria as set forth by DCA regulations as well as regular requirements for any proposed solid waste facility:

→ The public will be notified through a public hearing notice in the Waycross Journal Herald → The applicant and appropriate City Staff will evaluate the impact that the proposed facility will have upon current solid waste management facilities → The applicant and appropriate City Staff will evaluate the anticipated impact the proposed facility will have upon adequate collection and disposal capability within the City → The applicant and appropriate City Staff will evaluate the effect the proposed facility will have upon the general goal of waste reduction.

Plan Consistency

The overall goal of the City is ensure that proposed solid waste handling facilities are in areas which are suitable for such developments, are compatible with surrounding uses, and are not considered for locations in areas which have been identified by the community or the region as having environmental or other development or land use limitations. Therefore, no proposed facility or facility expansion will be site in the planning area without a letter from the City stating that this facility is consistent with the most current Solid Waste Management Plan.

To maintain further consistency with the plan, the entity, which proposes to site a solid waste handling facility in the City, must provide the local government at least 60 days prior to the filing for a solid waste permit, or notifying EPD in the case of a solid waste handling facility that is permitted by rule, submit to the City a written statement containing the following:

- → A method of notifying and involving the public in the process of consistency review. The applicant pursuing a permit for siting a landfill shall call a public meeting, placing an ad in the general circulation serving the municipality or county at least two weeks preceding the meeting, the ad shall state the time, place, and purpose of the meeting, provide written notice of the permit application to the City, request that the public notice be displayed prominently in City Hall.
- A description of the anticipated impact that the proposed facility will have upon the community; vehicle traffic and public safety around the proposed facility and throughout the planning area; financial impact to the financial viability of the existing solid waste management system within the planning area; impact to individual and business solid waste management rates; impact to other natural or cultural resources within the planning area and; impact to the current solid waste management infrastructure within the planning area, public and private.
- → An identification of the anticipated impact the proposed facility will have upon adequate collection and disposal capability within the planning area.
- → How the owner/operator of the proposed facility will satisfy the financial assurance provisions of the solid waste management plan.

Needs and Goals

The City of Waycross needs to begin an annexation study to analyze locations for a potential landfill in the event that all contingency efforts from both Southland Waste and Broadhurst Landfill fail to materialize. This does not mean the City will begin the creation of a landfill, only that an annexation study commenced for possible areas that one could be located due to the scarcity for that amount of land to be located within the City boundaries of Waycross. Also, the creation of a landfill will not be something that can be brought online with short notice and approximately twelve months planning would be needed.

VIII. Education and Public Involvement

There is no way to determine how much of a positive impact that educating and involving the public on awareness campaigns contribute to the effectiveness of waste reduction, but they are successful as any reduction can be seen as a benefit. Public awareness/education can be incredibly effective in disseminating vital public information

on issues of waste reduction, litter prevention, reuse and recycling, and the benefits and process of composting. The Ware County Board of Education has included in its curriculum areas of focus that detail the relationship with protection the environment through proper solid waste management.

When there is public involvement and buy-in for what types of program are offered, they become not only more effective, but can produce noticeable results. The types of programs can range from special pick up days, workshops. Saturday functions, educational workshops, and including neighborhood groups in the process.

Inventory

The City of Waycross will need to not only continue efforts to promote waste reduction through reuse and recycling but will also continue the following programs that have already been implemented:

- ✓ Keep America Beautiful as a joint effort with both City and County participation
- ✓ Utilization of local media outlets including local newspapers, Internet, and cable access channels to spread the message of the programs that are being offered, solid waste management practices, and other public announcement
- ✓ Special collection days where citizens bring such things as furniture and appliances to specified locations along with a copy of their City water bill to show their residency.
- ✓ Producing additional pamphlets that provide as much information to educate the public regarding these efforts
- ✓ Utilize the Code Enforcement department to prevent littering and illegal dumping as these are high profile cases that can showcase both the environmental and public aesthetic.

Needs and Goals

In the City of Waycross, there are four areas of need in terms of education and public involvement: recycling, resource recovery, reduction-at-source, and litter control. The City should continue to work with Keep America Beautiful and other community groups to promote each of these efforts.

Recycling

Promote recycling at home and work by educating the public about financial incentives to recycling. Use visual aids such as pamphlets, flyers, and news releases to consistently educate the public about recycling.

Reuse

Educate the public about re-using articles that are discarded but which have a remaining useful life such as clothing, batteries, furniture, and small appliances.

Reduction at Source

Educate the public and promote the development of reduction habits relating mainly to consumer purchases. This program should emphasize the fact that changing the buying habits of one household or business creates an awareness about source reduction, which when multiplied by thousands of households and businesses in the City can result in noticeable decreases.

Litter Control

Litter is the result of the irresponsible scattering of waste throughout the City along streets and highways and vacant lots. The City will continue to enforce the strict anti-littering laws and penalizing those that are found to be in violation of such.

IX. NEEDS, GOALS, AND STRATEGIES

Review of Needs and Goals

A) Waste Disposal Stream Analysis

- Begin implementing both an education strategy and program to better involve the public concerning the issues concerning a benefit to recycle.
- b. The City needs to work with other public agencies to develop a campaign to increase the importance of compositing organic materials that can be reused and replenish the soil as they constitute some 33% of waste from the City of Waycross

B) Waste Reduction

a. City of Waycross residents must be made aware of the results of this update of the plan where the amount of waste has seen a consistent rise over the last five years while the number of garbage customers has declined and this trend is showing no signs of reversing its trend.

City of Waycross Solid Waste Management Plan

b. Expand the scope of efforts at the Recycling Center and allow for more hours, possibly during the weekend, and partner with other agencies to increase the types of goods that can be taken for recycling to this location.

C) Waste Collection

a. There is a need during the next ten years to begin to research the possibility of the inclusion of a landfill within the City of Waycross.

D) Disposal

a. The City of Waycross will need to continue to coordinate efforts with Ware County, Ware County EMA, and through applicable City departments to ensure that there is a functional plan able to be brought online in the quickest of time frames in the event that there is disruption the disposal services.

E) Land Limitation

a. The City of Waycross needs to begin an annexation study to analyze locations for a potential landfill in the event that all contingency efforts from both Southland Waste and Broadhurst Landfill fail to materialize.

F) Education and Public Involvement

- a. In the City of Waycross, there are four areas of need in terms of education and public involvement: recycling, resource recovery, reduction-at-source, and litter control.
- b. The City should continue to work with Keep America Beautiful and other community groups to promote each of these efforts.

WASTE REDUCTION

Ten Year Plan

	2008	2009	2010	2(1) (2012	2013	2014	1015	2016	2017	1018	Responsible Agency	Annual Cost	Revenue Source
1) Continue Recycling Center Program	Х	Х	Х	Х	Х	X	Х	Х	X	Х	X	City of Wayeross Public Works	Staff Time	Annual Budget
2) Continue City of Wayeross Yard Trash Pickup	Х	X	Х	X	X	X	X	X	X	X	X	City of Wayeross Public Works	Cost is based on amount	User Fees
3) Increase office recycling programs throughout municipal buildings		X	х	X	X	X	X	X	X	X	X	City of Waycross Public Works	\$1,000	Annual Budget

COLLECTION

Ten Year Plan

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		Responsible Agency	Annual Cost	Revenue Source
1) Continue use of Southland Waste to pickup MSW	X	X	X	X	X	X	X	X	X	X	X	City of Waycross Public Works	Based on Annual Contracts	Annual Budget
2) Continue to provide special collections to citizens	Х	х	х	X	X	X	X	X	X	X	X	City of Waycross Public Works	Costs covered through collection fees from customer	Special Pickup Fees
3) Cost Recovered Through Sliding Scale of Fees (\$35- \$150)	X	X	Х	Х	Х	Х	Х	х	Х	X	X	City of Waycross Public Works	Fees covered through collection fees	Fee Collection

City of Waycross Solid Waste Management Plan

WASTE DISPOSAL

Ten Year Plan

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Responsible Agency	Annual Cost	Revenue Source
Continue contract with Southland Waste for next ten years	Х	Х	X	X	X	X	X	X	X	X	х	City of Wayeross	N/A	User Fees
2) Promote the Recycling Center through public awareness	X	х	X	X	Х	X	X	Х	X	X	X	City of Waycross Public Works	\$5,000	Annual Budget

LAND LIMITATIONS

Ten Year Plan

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Responsible Agency	Annual Cost	Revenue Source
1) Identify any areas within the City where locations of Solid Waste Facilities can be located for incorporation of 2011 plan revision	X	х	X	х	х	х	х	х	Х	х	х	City of Wayeross Public Works	Staff Time	N/A

EDUCATION AND PUBLIC INVOLVEMENT

Ten Year Plan

	2008	2009		2011	2012	2013	2014		2016		2018	Responsible Agency	Annual Cost	Revenue Source
1) Continue Recycling Center Program	Х	X	X	X	X	Х	Х	X	X	Х	X	City of Waycross Public Works	Staff Time	Annual Budget
2) Continue City of Waycross Yard Trash Pickup	Х	X	X	X	Х	X	X	Х	X	Х	X	City of Wayeross Public Works	Cost is based on amount	User Fees
3) Code Enforcement Community Blitz Campaigns	Х	X	X	X	X	X	X	Х	X	X	Х	City of Waycross Community Improvement Dept	Staff Hours + \$1,000	Annual Budget
4) Participate in Keep America Beautiful	X	X	Х	X	X	X	X	X	X	X	X	City of Wayeross	Staff Time	Annual Budget
5) Dissemination of Brochures	X	X	X	X	X	X	X	X	X	X	X	City of Waycross Public Works	\$500	Annual Budget
6) Utilize City Operated Local Access Channel 42	X	X	X	X	Х	X	X	X	X	X	X	City of Waycross Public Works	N/A	N/A
7) Participate in Local Festivals with Information Booths	Х	X	X	X	X	X	X	X	X	X	X	City of Wayeross Public Works	\$1,000	Annual Budget

City of Waycross Solid Waste Management Plan

APPENDIX A

RW Beck Southeast Georgia Waste Composition Study

Appendix M SOUTHEAST GEORGIA COMPOSITION

An objective of the study was to aggregate the composition and quantity of disposed waste by RDC. This section provides a series of tables and figures for the Southeast Georgia Regional Development Center.

Southeast Georgia Regional Development Center

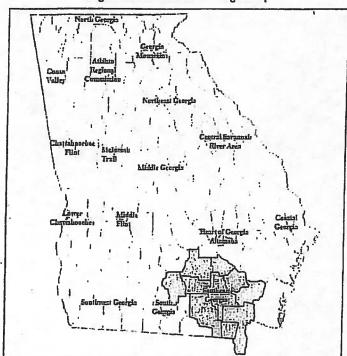


Figure M-1 Southeast Georgia Map

This section of the report presents the results for the Southeast Georgia Regional Development Center, which includes Atkinson, Bacon, Berrien, Brantley, Charlton, Clinch, Coffee, Pierce, and Ware counties.

In order to develop composition estimates for this RDC, field sampling was performed at Broadhurst Environmental, Wayne County laudfill.



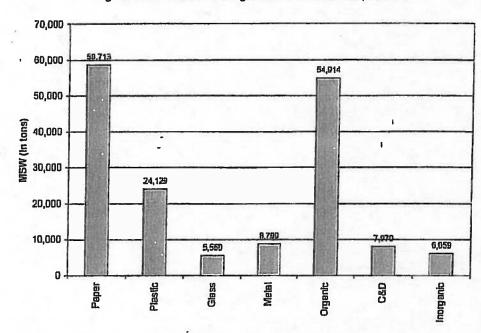


Figure M-3 Southeast Georgia RDC MSW Tons Disposed

Figure M-3 shows a bar graph of the actual tons of Southeast Georgia RDC's waste that are estimated to be disposed in the State's landfills (based on 2003 EPD facility reports). In absolute terms, nearly 59,000 tons of paper and nearly 55,000 tons of organics were the highest tons of material disposed in 2003-2004.

TABLE M-1 ADJUSTED WASTE DISPOSED IN SOUTHEAST GEORGIA

Regional Development Center	Tons of MSW Reported	Adjusted Tons of MSW
Southeast Georgia	249,467	166,145

Table M-1 shows the actual disposal tonnage reported to the state and the adjusted annual disposal tonnages after applying the weighted average percentage of MSW actually being disposed at MSW landfills throughout the state. The adjusted tons of MSW are used throughout this report.

RDC MSW Composition Results

Figure M-2 Southeast Georgia RDC Disposed MSW Composition

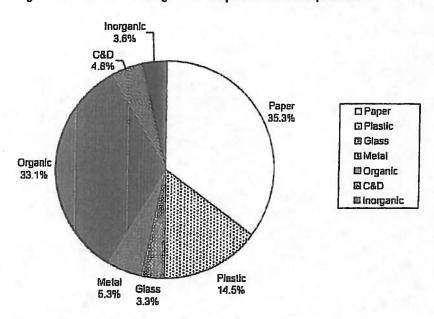


Figure M-2 presents the aggregate composition of major material groups in the Southeast Georgia RDC's disposed municipal solid waste stream. As shown, paper and organics make up the largest fractions of the waste stream, followed by plastics. Metals and C&D made up the fourth and fifth largest fractions of the waste stream, with inorganics and glass making up the smallest portion of the waste stream.

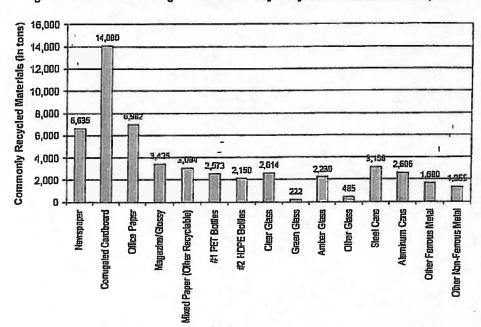


Figure M-4 Southeast Georgia RDC Commonly Recycled Materials Tons Disposed

Figure M-4 focuses on the tons of commonly recycled materials that were disposed. Overall, paper was found to be disposed in significant quantities in the RDC. Nearly 21 percent of all materials disposed are made from commonly recycled paper. Recyclable metals, glass and plastics were found at relatively lower disposal rates — five percent, three percent and three percent respectively.

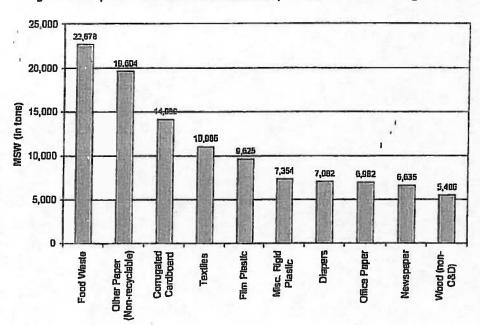


Figure M-5 Top 10 Most Prevalent Materials Disposed in Southeast Georgia RDC

Figure M-5 shows the top ten individual materials that were most prevalent in the Southeast Georgia RDC's disposed waste stream. Across the RDC, food waste makes up the largest fraction of disposed waste at 13.6 percent, followed by nonrecyclable paper (11.8 percent), corrugated cardboard (8.5 percent) and textiles (6.6 percent). Film plastic makes up 5.8 percent of the waste stream while miscellaneous rigid plastics, diaper, office paper and newspapers make up 4.4 percent, 4.3 percent, 4.2 percent and 4.0 percent respectively. No other materials make up more than 4.0 percent of the RDC-wide waste stream. The top ten most prevalent materials make up 66.5 percent of the disposed waste stream.

Table M-2 Southeast Georgia RDC Landfilled MSW Composition Detail (Weight Percent)

Group	Material	Tous Disposed	Average	Standard Deviation	Lower Boundary	Upper Boundar
Paper	Newspaper	6,635	4.0%	4.9%	2.9%	5.2%
	Corrugaled Cardboard	14,080	8.5%	7.4%	6.5%	10.7%
	Office	6,982	4.2%	6.0%	3.0%	,5.6%
	Magazine/Glossy	3,425	21%	1.9%	1.5%	2.7%
	Paperboard	4,903	3.0%	2.0%	2.496	3.6%
	Mixed (Olher Recyclable)	3,084	1.9%	1.9%	1.4%	2.4%
	Other (Non-recyclable)	19,604	11.8%	6.0%	10.2%	13.5%
	Total Paper	59,713	35,3%	12.2%	32.0%	38.0%
Plastic	#1 PET Bollles	2,573	1.5%	1.3%	1.2%	1.9%
	#2 HDPE Bollles	2,150	1.3%	1.1%	1.0%	1.6%
	#3 -# 7 Bollles	474	0.3%	0.4%	0.2%	0.4%
	Expanded Polyslyrene	1,953	1.2%	0.8%	1.0%	1.4%
	Film Plastic	9,625	5.8%	2.8%	4.9%	6.8%
	Olher Rigid Plaslic	7,354	4.4%	3.4%	3.6%	5.3%
	Total Plastic	24,129	14.5%	5,3%	13.0%	16.1%
Gloss	Clear	2,614	1.6%	1.3%	1.2%	2.0%
	Green	222	0.1%	0.3%	0.1%	0.2%
	Amber	2,239	1.3%	2.2%	0.8%	2.0%
	Other :	485	0.3%	0.5%	0.2%	0.4%
	Total Glass	5,560	3.3%	3.4%	2.4%	4.4%
Metal	Sieel Cana	3,158	1.9%	1.7%	1.4%	2.4%
	Aluminum Cans	2,606	1.6%	4.9%	1.0%	2.2%
	Other Ferrous	1,680	1.0%	1.1%	0.7%	1.4%
	Other Non-Ferrous	1,355	0.8%	1,4%	0.5%	1.2%
	Total Metal	8,799	5.3%	5,5%	4.2%	6,6%
Organics	Yard Waste	3,162	1.9%	3.6%	1.1%	3.0%
	Wood (non-C&D)	5,486	3.3%	9.5%	1.796	5.4%
	Food Waste	22,678	13.6%	10.2%	11.1%	16.4%
	Textiles	10,986	6.6%	8.5%	4.7%	8.8%
	Diapera	7,0B2	4.3%	6.5%	2.8%	6.0%
	Fines —	3,880	2.3%	1.4%	1.9%	2.8%
	Other Organics	1,640	1.0%	1.2%	0.7%	1.3%
	Total Organic	54,914	33.1%	14.3%	29.0%	37.3%
C&D	Drywall	4	0.096	0.0%	0.0%	0.0%
	Wood	1,405	0.8%	1.8%	0.4%	1.496
	Inerts	842	0.5%	2.1%	0.2%	0.9%

Group	Material	Tous Disposed	Average	Standard Deviation	Lower Boundary	Upper Boundary	
	Carpel	530	0.3%	1.4%	0.1%	0.6%	
	Olher C&D	5,189	3.1%	11.3%	1.4%	5.4%	
	Total C&D	7,970	4.8%	17.6%	2.6%	7.6%	
Inorganics	Televisions	0	0.0%	0.0%	0.0%	0.0%	
	Compulers	567	0.3%	1.7%	0.1%	0.6%	
	Other Electronics	2,635	1.6%	3.5%	0.9%	2.4%	
	Tires	1,676	1.0%	3.5%	, 0.5%	1.8%	
	HHW	290	0.2%	0.6%	0.196	0.3%	
	Other Inorganics	891	0.5%	1.1%	0.3%	0.9%	
	Total Inorganics	6,059	3.6%	5.3%	2.4%	5.2%	
	TOTAL	166,145	100.0%				

Table M-2 presents a detailed statistical summary of the composition of disposed MSW in the Southeast Georgia RDC.

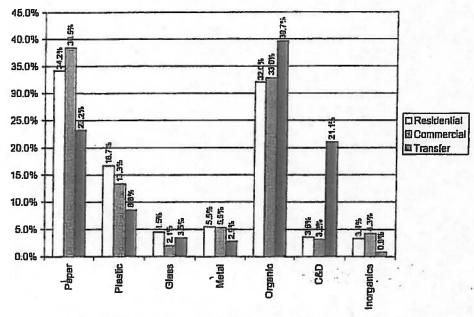
Result Comparisons by Generating Sector

Table M-3 Landfilled Southeast Georgia RDC MSW Composition by Generating Sector (Southeast Georgia RDC Average Percent of Waste Stream)

Group	Moterial	Residential	Commercial	Transfer Trailer
Paper	Newspaper	4.5%	3.9%	1.8%
·	Corrugated Cardboard	6.1%	11.1%	7.0%
	Office	3.2%	5.5%	2.2%
	Magazine/Glosay -	2.6%	1.5%	1.9%
	Paperboard	4.6%	1.5%	1.9%
	Mixed (Olher Recyclable)	2.4%	1.4%	1.0%
	Olher (Non-recyclable)	10,8%	13.6%	7.6%
	Total Paper	34.2%	30.5%	23.2%
Plastic	#1 PET Bollles	1.7%	1.5%	1.2%
	#2 HDPE Bollles	1.6%	1.196	0.9%
	#3-#7 Bollles	0.4%	0.296	0.2%
	Expanded Polyslyrene	1.496	1.0%	0.8%
	Film Plastic	6.0%	6.0%	3.3%
	Other Rigid Plastic	5.6%	3.6%	22%
	Total Plastic	16.7%	13.3%	8.6%
Glass	Clear	2.2%	0.9%	1.8%
	Green	0.2%	0.1%	0.4%
	Amber	1.7%	1.1%	1.196
	Olher	0.5%	0.1%	0.3%
	Total Glass	4,5%	2.1%	3.5%
Vietal	Sleel Cans	2.196	1.8%	1.2%
	Aluminum Cans	1.0%	2.3%	0.796
	Other Ferrous	1.2%	0.9%	0.8%
	Olher Non-Ferrous	1.3%	0.5%	0.2%
	Total Metal	5.5%	5.5%	2.9%
Organics	Yard Wasle	1.6%	25%	0.0%
	Wood (nan-C&D)	3.5%	1.6%	11.9%
	Food Waste	11.5%	17.0%	6.8%
	Textiles	6.5%	5.0%	16.7%
	Diapers	4.5%	4.4%	1.9%
	Fines	3.2%	1.7%	1.3%
	Other Organics	1.2%	0.7%	1.0%
	Total Organic	32.0%	33.0%	39.7%

Group	Moterial	Residential	Commercial	Transfer Trailer
C&D	Drywall	0.0%	0.0%	0.0%
	Wood	0.6%	1.196	0.4%
	Ineria	0.8%	0.3%	0.0%
	Carpel	0.7%	0.0%	0.0%
	Other C&D	1.4%	1.9%	20.8%
	Total C&D	3.6%	3.2%	21.7%
Inorganics	Televisions -	0.0%	0,0%	0.0%
	Computers	0.0%	0.7%	0.0%
	Olher Electronics	1.5%	2.0%	0.0%
	Tires	0.8%	1.3%	0.0%
	нн	0.1%	0.2%	0.9%
	Other Inorganics	1.0%	0.1%	0.0%
	Total Inorganics	3.4%	4.3%	0.9%
	TOTAL	100.0%	100.0%	100.0%

Figure M-6 Southeast Georgia RDC Composition by Generating Sector



Figures M-6 compares the composition percentage by material group for residential, commercial, and transfer trailer waste in the Southeast Georgia RDC.

Figure M-7 Top 10 Most Prevalent Materials in Southeast Georgia RDC Residential Waste

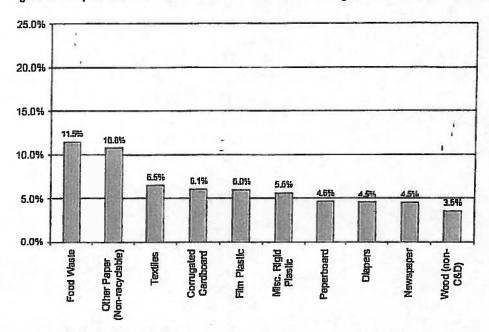


Figure M-8 Top 10 Most Prevalent Materials in Southeast Georgia RDC Commercial Waste

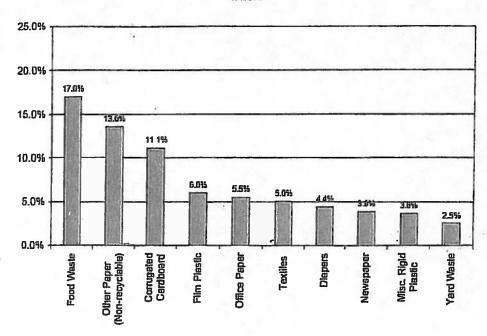


Figure M-9 Top 10 Most Prevalent Materials in Southeast Georgia RDC Transfer Trailer Waste

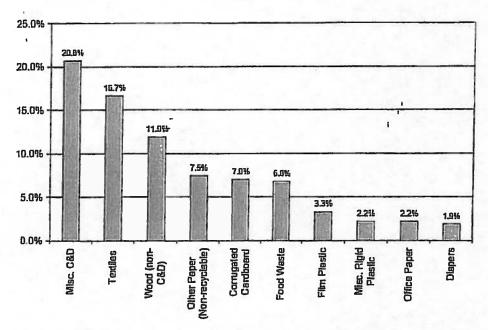
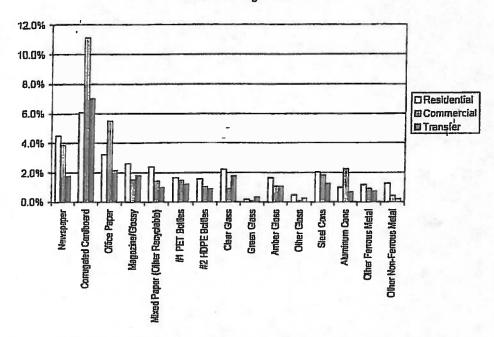


Figure M-7 shows the top 10 most prevalent materials in the Southeast Georgia RDC's Residential Waste. Food waste is disposed in the highest quantity, with other paper (non-recyclable) and textiles as the second and third highest disposed items respectively. The most noticeable variance between the sectors is that commercial and transfer sectors (Figures M-8 and M-9) have much more high grade office paper than the residential sector in this RDC. Additionally, paperboard is much more common in the residential sector than in the commercial and transfer trailer sectors.

Figure M-10 Commonly Recycled Materials Disposed in Southeast Georgia RDC by Generating Sector



Figures M-10 compares the amount of commonly recycled materials disposed in the municipal solid waste stream by generating sector. Note that paper is being disposed of in the highest quantities from all three generating sectors, with metal as the second highest item disposed in residential and commercial and just slightly less than glass in the transfer trailer sector.

Appendix N MATERIAL DEFINITIONS

The following table shows the material definitions approved by the Georgia Department of Community Affairs and used in conducting this study.

Material Group		Material Category	Material Definition
Paper	1	Newapaper	Printed and unprinted ground wood newsprint. This category includes glossy paper inserts included with the newspaper.
	2	Corrugaled Cardboard	Old Corrugated Cardboard (OCC) and Kraft Paper - Kraft linerboard and containerboard cartons and shipping boxes with corrugated paper medium (excludes wax or plastic coated boxes). Includes Kraft paper bags.
	3	Office	High-grade paper. Bond, reg-content, manila, or stationery grade paper with or without color. Includes ledger, photocopy paper, computer printouls, manila folders, index cards, and envelopes (with and without windows or gummed labels).
	4	Magazine/ Glossy	Magazines and calalogs printed on glossy, coated paper slock.
	5	Paparboard	Paperboard and boxboard such as that used for cereal and lissue boxes
	6	Mixed (Other Recyclable)	Low grade recyclable paper. Includes phone books, text books, other books and catalogs with groundwood paper; construction paper, junk mail, polycoaled carlons and aseptic packages, blue prints, and glossy, coaled paper (except magazines and catalogs).
	7	Olher (Non-recyclable)	Low-grade non-recyclable paper. Includes lissue paper, napkins, paper lowels, paper plates, paper food cartons, cigarette packages, waxed paper, wax or plastic coated corrugated boxes, coated FAX paper, and carbon paper, whether or not they are contaminated with fluids or food. Includes all other grades of paper if substantially contaminated with fluids or food waste, including pizza boxes.
laslic	8	#I PET Botlles	Blow molded plastic bottles and jers labeled #1 PET
_	9	#2 HDPE Boliles	Blow molded plastic bottles and jars (both natural and pigmented) labeled #2 HDPE
	10	#3-#7 Bollies	Blow molded plestic bottles and jars labeled #3, #4, #5 #6 or #7



Material Group Plastic – cont. 11		Material Category	Material Definition			
		Expanded Polyelyrene	Food service polyslyrene, polyslyrene packaging, and "peanuls". Any expanded foam product labeled #6.			
	' 12	Film Plastic	Any film plastic including gerbage bags, retail bags, cereal bags, sheet plastic, shrink wrap, terping, and other non-rigid plastic.			
	13	Olher Rigid Plasfic	Includes other thermoformed or injection-molded rigid plastic not captured in the above categories. Includes tubs trays and containers labeled #1, #2, #3, #4, #5, #6 and #7. Includes all non-container rigid plastics such as plastic pipe electrical components, automotive components, toys, and foamed plastics.			
Glass	14	Clear	Recyclable clear beverage and food bottles and jers			
	15	Green	Recyclable green beverage and food bottles and jars			
	16	Amber	Recyclable amber beverage and food boillos and jers			
	17	Olher Gless	Flat, pressed and blown glass products such as light bulbs, mirrors, decorative items and fixtures, windows, safety glass, and cooking ware.			
Melal	18	Steel Cans	All coaled and lin-free ferrous food and beverage cans. Includes bi-metal cans and non-aerosol spray cans			
	19	Aluminum Cans	All aluminum food and beverage containers			
	20	Other Ferrous (non-C&D)	Ferrous and alloyed ferrous scrap metals from any source except intact white goods and C&D meterial defined below.			
	21	Other Non-Ferrous (non-C&D)	Aluminum lins, foils; copper, brass; stainless steel; etc. as long as the nonferrous is not from C&D			
Organica	22	Yard Waste	Yard wasle including grass clippings, leaves, garden trimmings, and brush up to 4 inches in diameter			
	23	Wood (Non-C&D)	Any painted or unpainted wood product not from construction, demolition, or renovation. Includes furniture, toys, pencils, chopsticls, other misc items.			
	24	Food Wasle	Putrescible food waste.			
	25	Textiles	Fabric malerials including natural and man-made textile materials made from cottons, wools, silks, nyton, rayon, polyesters, and other materials. This category includes clothing rags, curtains, and other fabric materials. Leather and leather goods are also included such as belts and			
		-	wallets, Includes all shoes.			
	26	Diepera	Diapers and adult sanitary products			
	27	Fines	All particles capable of passing through a 2-inch screen if encountered loose, regardless of material type. Includes small pieces of paper, plastic, broken glass, metal, toose soil, food screps, bottle caps, and grass clippings.			

Material Definitions

Material Group		Material Category	Material Definition
	28	Olher Organics	Organic malerials not otherwise calegorized, such as natural fibers, manure, cork, hemp rope, wicker products sawdust, and lint.
C&D	29	Drywali	Gypsum-based wallboard, including blueboard for use in the drywall or plaster trades
	30	Wood	May include painled and unpainled, or could be two separate categories
	31	Inedia	Concrete, brick, rock, dirt
	32	Carpet	Carpel
	33	Olher C&D	C&D not otherwise classified.
Inorganics	34	Televisions	Televisions
	35	Computers	Computers
	36	Olher Electronics	Electronic or electrically powered household products not otherwise classified, such as hair dryers, radios, stereos, microwave ovens, and telephones.
	37	Tires	Tires
	38	HHW	Wastes resulting from products purchased by the general public for household use or similar commercial use which, because of their quantity, concentration, or physical, chemical, or infections characteristics, may pose a hazard to human health. Examples include paints, solvents, flammable liquids, toxics, corrosives, pesticides and herbicides, batteries, syringes, reactives and explosives. Empty HHW containers are not considered HHW.
	39	Other Inorganics	Inorganic material not otherwise classified, such as rock, dirt, sand, and certain manufactured products composed of entirely inorganic materials

APPENDIX B

City of Waycross Recycling Center Flyer

City of Waycross Recycling Center

1708 Riverside Avenue

Hours of Operation

8:30 am - 1:30 pm Monday, Wednesday and Friday

NOTE: Please remove recyclable materials from plastic bags before depositing into bins. A garbage container will be available to dispose of non-recyclable items used for storage and transport purposes.

The following items are accepted

- ALUMINUM CANS. Please flatten cans before placing in bin.
- <u>• Newspapers and Magazines</u>. Place loose in bins or in paper grocery bags. DO NOT place in plastic bags or bundle with string or twine. This includes all newsprint, glossy flyers, advertising supplements, magazines, catalogs and telephone books.
- PAPER, MIXED. This includes office paper such as steno, legal or message pads; computer, laser, photocopy, fax or glossy paper; advertising brochures; manila folders and envelopes; and other envelopes. Also pasteboard such as cereal and tissue boxes; books with hard covers removed; and paper bags. Staples and paperclips are acceptable but paper must be removed from notebook binders, plastic folders or other plastic packaging. NO soiled tissues or paper towels.
- STEEL CANS (FROM CANNED FOODS). Please rinse cans out to avoid unpleasant odors and insects. Please remove labels. NO paint, chemical, solvent or spray cans.
- <u>Cardboard</u>. Must be broken down. Remove all packing materials from box (including paper). Both plain and printed cardboard are recyclable. <u>NO waxed cardboard accepted</u>.











Additional Recycling Tips

- Most Elementary schools recycle toner and ink jet cartridges and cell phones.
- · Reuse margarine, yogurt and similar containers to store leftovers.
- Reuse or recycle plastic grocery bags at stores where you shop.
- Donate old books and magazines to organizations interested in reusing them.

APPENDIX C Landfill Assurance Letter



Broadhurst

Environmental

P.O. Box 278 Screven, GA 31560 Phone: (912) 530-7050 Fax: (912) 530-7070

Honorable Mayor Clarence E. Billups -City of Waycross PO Drawer 99 Waycross, GA 31502

Dear Mayor Billups,

This letter serves as a disposal capacity assurance for waste generated by the City of Waycross from 2008 to 2018. The Georgia EPD permit number for this facility is 151-014D(SL). This assurance is based upon the City of Waycross disposing of approximately 52,322 cubic yards of waste or approximately 47,090 tons of waste at this facility on an annual basis.

We thank the City of Waycross for this business partnership and look forward to providing environmentally sound waste disposal options for the foreseeable future.

Sincerely

John W. Simmons General Manager

APPENDIX D

City of Waycross Zoning Ordinance Section 716

- residential uses and meeting the applicable requirements of Section 610.1. Such buffer strip shall be composed of and maintained with healthy plants which possess growth characteristics of such a nature so as to provide within five (5) years, a planting screen not less than five (5) feet wide and not less than six (6) feet high.
- g) Floor Area Ratio. Maximum floor area ratio, including any parking space within the structure, shall not exceed fifty (50) percent for single-story buildings nor shall it exceed one hundred (100) percent for buildings of more than one story. The ground area occupied by the principal and accessory structures shall not exceed fifty (50) percent of the total zoning lot area.

715.5 - OTHER REQUIREMENTS

- a) All Development. The following requirements shall pertain to all permitted uses:
 - Lighting. Any floodlights used to illuminate the premises are directed and/or shielded so as not to be an annoyance to any adjacent residential district.
 - Noise. Any regularly recurring noises connected with the activity and detectable by the human sense of hearing, without instruments, shall not exceed the normal noise level generated by uses permitted within the adjacent residential district.
 - Access. Access to the activities is provided primarily from a major or collector street as designated on the Zoning Maps except that secondary access may be provided from a minor street.
- b) Group Development. Two or more principal buildings or principal uses as permitted within the zoning district in which the proposed development is located, on one or more contiguous lots are permitted in accordance with the following additional standards:
 - Street Access. Any building established as a part of a group development which cannot be served from an abutting street shall be made accessible to vehicles by a paved driveway having a roadbed width of not less than twenty (20) feet, exclusive of parking spaces.
 - 2) Setback Requirements. All buildings and structures established as a part of a group development shall comply with the front yard setbacks and the exterior rear yard requirements established for the district in which located.
 - 3) Site Development Plat. A site development plat showing location of Buildings with their proposed use, location of access ways, setback lines, parking and buffers shall be submitted for review with the request for building permit.

SECTION 716 – WRD WATER RESOURCE DISTRICTS

716.1 – PURPOSE - The intent of this section is to establish minimum development standards and criteria which will afford reasonable protection of environmentally sensitive natural resources found throughout the City of Waycross. Based on the findings of the Waycross-Ware County Comprehensive Plan, it has been determined the wise management of these resources as defined in this Section is essential to maintaining the health, safety, general welfare and economic well being of the public.

716.2 – ESTABLISHMENT OF WATER RESOURCE DISTRICTS. Waycross' Water Resource Districts shall include the following:

Groundwater Recharge Area District River Corridor Protection Districts Wetlands Districts

The boundaries of these Water Resource Districts are shown on a set of maps designated as "Water Resource Districts" and are included as part of the Waycross Official Zoning Map, which is on file with the Zoning Administrator's office located in the Waycross City Hall.

716.3 - DEFINITIONS. In addition to the general definitions provided in this Ordinance, the following definitions shall apply to this Section:

- a) Water Resource Districts. A Water Resource District is a map overlay which imposes a set of requirements in addition to those of the underlying zoning district.
- b) Hazardous Waste. Any solid waste, by reason of its toxic, caustic, corrosive, abrasive, or otherwise injurious properties, which may be detrimental to the health of any person handling or otherwise coming into contact with such material or substance. The U.S. Environmental Protection Agency has developed a list of hazardous wastes based upon corrosivity, reactivity and toxicity.
- c) River/Stream Bank. The rising ground, bordering a river or a stream, which serves to confine the water to the natural channel during the normal course of flow.
 - d) Utility. Public, private water or sewer piping systems, water or sewer pumping stations, electric power lines, fuel pipelines, telephone lines, roads, driveways, bridges, river/lake access facilities, storm water systems and railroads or other utilities identified by a local government.
 - e) Wetlands. Those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. The ecological parameters for designating wetlands include hydric soils, hydrological vegetation and hydrological conditions involving a temporary or permanent source of water to cause soil saturation. For the purposes of the Ordinance, the 1987 National Wetlands Inventory shall serve to define these potential areas.

716.4- GROUNDWATER RECHARGE AREA DISTRICT.

- 4.1 Findings of Fact. Recharge areas are vulnerable to urban development activities as well as agricultural activities. Pesticides, herbicides sprayed on crops, animal waste and septic tank effluents contribute to a deterioration in the groundwater quality and can threaten the health of residents relying on well water. Development usually means an increase in the amount of land covered with impervious surfaces. Paving land in recharge areas can alter or impair their recharge characteristics thereby decreasing groundwater supplies.
- 4.2 **Purpose**. The purpose of this district is to establish criteria to protect significant groundwater recharge areas from pollution by spills, discharges, leaks, impoundments, application of chemicals, injections and other development pressures.
- 4.3 **District Delineation.** The groundwater recharge area protection map is delineated according to the Georgia Department of Natural Resources "Significant Recharge Area, Hydrological Atlas 18 (1989 Edition)" and the Georgia Department of Natural Resources "Pollution Susceptibility Map Hydrological Atlanta 20, 1992 Edition". Standards for this district shall comply with the DNR Rule 391-3-16-.02, Criteria for the Protection of Groundwater Recharge Areas.
- 4.4 **Permitted Uses.** All uses allowed in the underlying zoning districts are permitted in the Groundwater Recharge Area Protection District. The following are additional requirements for specific uses:
 - (a) All above-ground chemical or petroleum storage tanks, having a minimum volume of 660 gallons, shall meet the requirements of U.S. EPA rules for oil pollution prevention, 40 CFR 1121. Such tanks used for agricultural purposes are exempt, provided they comply with all Federal requirements.
 - (b) New agricultural waste impoundment sites shall be lined if they are within:
 - 1) a high pollution susceptibility area;
 - a medium pollution susceptibility area and exceed 15 acre-feet in size; and
 - 3) a low pollution susceptibility area and exceed 50 acre-feet in size. As a minimum, the liner shall be constructed of compacted clay having a thickness of one-foot and a vertical hydraulic conductivity of less than 5 x 10-7 cm/sec or other criteria established by the U.S. Soil Conservation Service.
 - (c) New homes served by septic tank/drain field systems shall be on lots having the following minimum size limitations as identified on the following minimum size limitations as identified on Table MT-1 of the Department of Human Resources' Manual for On-Site Sewage Management Systems ("DHR Table MT-1"):
 - 1) 150% of the subdivision minimum lot size of DHR Table MT-1 if they are within a high pollution susceptibility area:
 - 2) 125% of the subdivision minimum lot size of DHR Table MT-1 if they are within a medium pollution susceptibility area; and

- 3) 110% of the subdivision minimum lot size of DHR Table MT-1 if they are within a low pollution susceptibility area. New homes served by a public sanitary sewer system shall be on lots having size limitations as identified in the underlying zoning district requirements which apply to subdivision lot.
- (d) New mobile home parks served by septic tank/drain field systems shall have lots or spaces having the following size limitation as identified on Table MT-2 of the Department of Human Resources' (DHR) manual for On-Site Sewage Management Systems ("DHR Table MT-2)":
 - 1) 150% of the subdivision minimum lot size of DHR Table MT-2 if they are within a high pollution susceptibility area:
 - 125% of the subdivision minimum lot size of DHR Table MT-2 if they are within a medium pollution susceptibility area; and
 - 3) 110% of the subdivision minimum lot size of DHR Table MT-2 if they are within a low pollution susceptibility area.
 - 4) Local governments at their option may exempt any lot of record on the date of their adoption of these lot size standards from the minimum lot size requirements.

No construction may proceed on a building or mobile home to be served by a septic tank unless the county health department first approves the proposed septic tank installation as meeting the standards of the DHR Manual and minimum lot size requirements.

New mobile home parks served by a public sanitary sewer system shall be on lots having size limitations as identified in the underlying zoning district requirements which apply to such lot.

- (e) New facilities which handle hazardous materials, of the types (listed in Section 312 of the Resource Conservation and Recovery Act of 1976, excluding underground storage tanks) and in amounts (10,000 pounds or more on any one day) shall perform their operations on impervious surfaces and in conformance with any applicable federal spill prevention requirements and any local fire prevention code requirements.
- (f) Permanent storm water infiltration basins shall not be constructed in areas having high pollution susceptibility.

716.5 - SATILLA RIVER CORRIDOR PROTECTION DISTRICT

- Description of District. The limits of the Satilla River Corridor Protection District are hereby defined to be all areas within 100 feet horizontally of the river, measured form the river bank. This area shall remain in an undisturbed vegetative buffer. The 100-foot buffer is measured form the uppermost part of the river bank, usually marked by a break in slope. Although not within the buffer area, the area between the top of the river bank and the water's edge shall be included in the district.
 - Because these protective measures allow some latitude with land uses and because the District is not intended to prescribe a specific land use but rather, to define a range of acceptable land uses, the Satilla River Corridor Protection District is designed as an overlay district. Within the range of land uses which can be located within the District, this Section establishes performance standards which apply to development within the District. The regulations of the underlying zoning district shall be maintained and not affected, except in the event of conflict or discrepancy between the Overlay District and the underlying zoning district. In that case, the more stringent requirements shall be observed.
- 5.2 Intent. The intent of the regulations within this Zoning District is to limit the use of the Satilla River Corridor, in conjunction with other governmental entities along the Satilla River Corridor, in order to:
 - 1) Assure that the section of the river in City of Waycross will not become polluted and unsuitable as a source for potable water.
 - 2) Protect the river corridor by establishing a natural vegetative buffer area bordering the river;
 - 3) Preserve those qualities that make the river corridor suitable as a habitat for wildlife;
 - 4) Help control erosion and to absorb flood waters.
 - The further intent of this district is to protect and safeguard the health and welfare of all the citizens of Waycross by providing protection of the section of the river that is or may be used as a future source of drinking water.
- 5.3 Conditions and Performance Standards. Within the Overlay District, the following conditions and performance standards shall apply, in addition to the regulations of the original zoning district on which the Overlay District is superimposed.
- 5.4 Permitted Uses.
 - (a) Allow the building of single-family dwellings, including the usual appurtenances, within the buffer area, subject to the following conditions:
 - 1) The dwelling shall be in compliance with all local zoning regulations.
 - 2) The dwelling shall be located on a tract of land containing at least two acres. For the purposes of these standards, the size of the tract of land shall not include any area that lies within the protected river (that is, for tracts of land that include portions of a protected river, the area between the river banks cannot be counted towards the two acre minimum size).
 - 3) There shall be only one such dwelling on each two-acre or larger tract of land.

- 4) A septic tank or tanks serving such a dwelling may be located within the buffer area.
- 5) Septic tank drainfields shall not be located within the buffer area.
- (b) The construction of road and utility crossings shall meet all requirements of the Erosion and Sedimentation Control Act of 1975 and of any applicable local ordinances on soil erosion and sedimentation control.
- (c) Timber production and harvesting, subject to the following conditions:
 - 1) Forestry activity shall be consistent with best management practices established by the Georgia Forestry Commission; and
 - 2) Forestry activity shall not impair the drinking quality of the river water as defined by the federal Clean Water Act, as amended.
- (d) Wildlife and fisheries management activities consistent with the purposes if Section 12-2-8 (as amended) of Article I, Chapter 2, Title 12 of the Official Code of Georgia Annotated (O.C.G.A.)
- (i) Wastewater treatment.
- (j) Recreational usage consistent either with the maintenance of a natural vegetative buffer or with river-dependent recreation. (For example, a boat ramp would be consistent with this criterion.)
- (k) Natural water quality treatment or purification.
- (l) Agricultural production and management, subject to the following conditions:
 - Agricultural activity shall be consistent with best management practices established by the Georgia Soil and Water Conservation Commission;
 - Agricultural activity shall not impair the drinking quality of the river water as defined by the federal Clean Water Act, as amended;
 - Agricultural activity shall be consistent with all state and federal laws and all regulations promulgated by the Georgia Department of Agriculture.
- (m) Other uses permitted by the DNR or under Section 404 of the Clean Water Act.

5.5 Prohibited Uses.

- (a) Handling areas for the receiving and storage of hazardous waste must be prohibited within river corridors.
- (b) Except as related to single-family dwellings within the river corridor, septic tanks and septic tank drainfields are prohibited within the 100-foot buffer.
- 5.6 Exemptions. Waycross exempts the following from the River Corridor Protection requirements:
 - (a) Land uses existing prior to the adoption of the River Corridor Protection Requirements.
 - (b) Mining activities, if permitted by the DNR pursuant to the Georgia Surface Mining Act of 1968j, as amended.
 - (c) Utilities, (except as discussed above in Section IV.E) If such utilities

cannot feasibly be located outside the buffer area (feasibility shall be decided conservatively by the local government), provided that:

- i. The utilities shall be located as far from the riverbank as reasonably possible;
- ii. Installation and maintenance of the utilities shall be such as to protect the integrity of the buffer area as well as is reasonably possible; and
- iii. Utilities shall not impair the drinking quality of the river water.
- (d) Specific forestry and agricultural activities except as discussed above.
- 5.7 **Restoration of Buffer.** The natural vegetative buffer shall be restored as quickly as possible following any land-disturbing activity or construction within the river corridor related to the acceptable uses above.
- 5.8 **Construction Prohibited.** Except as noted above, all construction within the buffer area shall be prohibited.

716.6 WETLANDS DISTRICT

- 6.1 Findings of Fact. The wetlands within Waycross are indispensable and fragile natural resources with significant development constraints due to flooding, erosion and soil limitations. In their natural state, wetlands serve man and nature. They provide habitat areas for fish, wildlife and vegetation; water quality maintenance and pollution control; flood control; natural resource education; scientific study; and recreational opportunities.
- 6.2 **Purpose.** The purpose of the Overlay District is to promote the wise use of wetlands and protect them from alterations which will significantly affect or reduce the primary functions for water quality, flood plain and erosion control, ground water recharge, aesthetic natural areas and wildlife habitat areas.
- 6.3 District Delineation. These regulations shall apply to all lands within wetlands located within Ware County. The Wetland District Overlay Map, adopted as part of this ordinance, shows the general location of wetlands, according to the 1987 National Wetlands Inventory and should be consulted by persons considering activities in or near wetlands before engaging in a regulated activity. The standards for this district shall comply with Department of Natural Resources Rule 391-3-16-03, Criteria for Wetlands Protection.
- 6.4 Wetland Development Permit Requirements. No activity or use except those identified in Section 9-6-.5 shall be allowed within the Wetland Overlay District without a permit issued by the U.S. Army Corp of Engineers. If the subject property contains jurisdictional Wetlands of the United States as delineated by the National Wetlands Inventory Map or as determined by the U.S. Army Corps of Engineers.

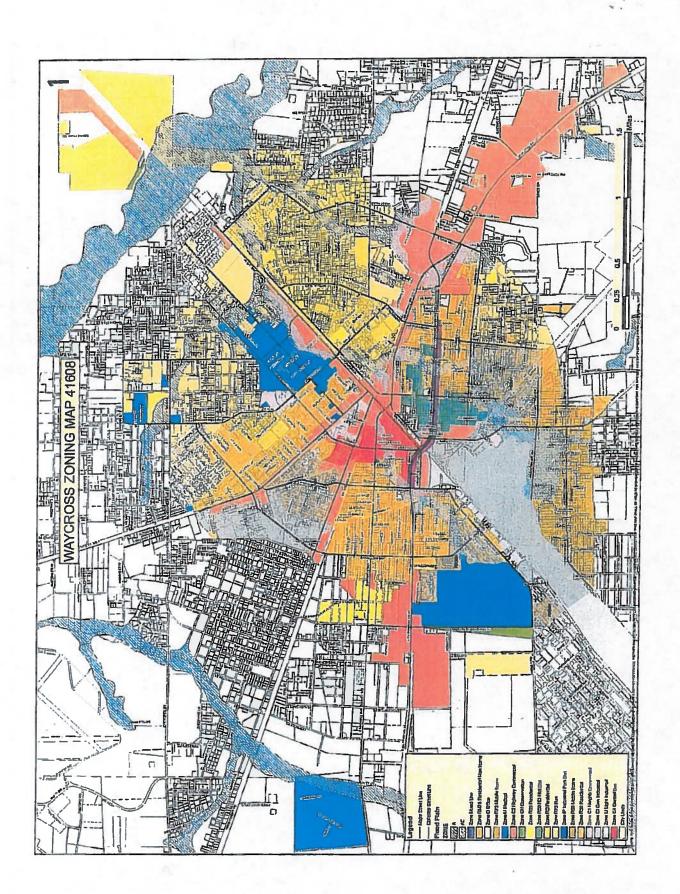
If jurisdictional wetlands are contained within the subject property, the applicant must document receipt of a Nationwide, Regional, General or Individual permit, from the

U.S. Army Corps of Engineers under Section 404 of the Clean Water Act before a development permit will be issued by Waycross.

- 6.5 **Permitted Uses.** The following uses are permitted by right within Wetland District to the extent they are not prohibited by any other ordinance or law and provided they do not require structures, grading, fill, draining or dredging:
 - 1) Forestry practices applied in accordance with best management practice approved by the Georgia Forestry Commission. Section 404 does not require permits for normal, ongoing silvicultural activities. However, Section 404 does list some required road construction best management practices that must be followed in order to qualify for such an exemption.
 - 2) Conservation or preservation of soil, water, vegetation, fish or other wildlife, provided the conservation or preservation does not affect waters of the State of Georgia or of the united States in such a way that would require an individual 404 permit.
 - 3) Outdoor passive recreational activities, including fishing, bird watching, hiking, boating, horseback riding and canoeing.
 - 4) Natural water quality treatment or purification.
 - 5) Normal agriculture activities including the planting and harvesting of crops and pasturing of livestock. Such activities shall be subject to best management practices approved by the Georgia Department of Agriculture.
- 6.6 **Prohibited Uses.** The following uses are prohibited in a Wetland District:
 - 1) Receiving areas for toxic or hazardous waste or other contaminants.
 - 2) Hazardous or sanitary landfills.

APPENDIX E

City of Waycross Zoning Map



RESOLUTION NO. 08-44

A RESOLUTION OF THE CITY OF WAYCROSS, GEORGIA TO ADOPT A SOLID WASTE MANAGEMENT PLAN AS REQUIRED UNDER GEORGIA LAW AND FOR OTHER PURPOSES.

WHEREAS, The City of Waycross seeks to comply with the Georgia Comprehensive Solid Waste Management Act which requires county and municipal governments to prepare a local solid waste management plan and periodic update: and

WHEREAS, City of Waycross, Georgia has compiled, reviewed and modified an update to the Solid Waste Management Plan for City of Waycross; and

WHEREAS, City of Waycross, Georgia has complied with the Rules of Georgia Department of Community Affairs Minimum Planning Standards and Procedures for Solid Waste Management (Chapter 110-4-3) including public participation requirements;

NOW, THEREFORE, BE IT RESOLVED by the City of Waycross City Commission that the document entitled 2008 – 2018 Solid Waste Management Plan be officially approved and adopted.

SO, RESOLVED the _____ day of October, 2008 at the City of Waycross, Ware County, Georgia.

CITY OF WAYCROSS

MAYOR

ATTEST:

GLERK

A RESOLUTION OF THE CITY OF WAYCROSS, GEORGIA TO TRANSMIT THE CITY'S SOLID WASTE MANAGEMENT PLAN UPDATE

WHEREAS, The Georgia Comprehensive Solid Waste Management Act requires county and municipal governments to prepare a local solid waste management plan and periodic update: and

WHEREAS, The City of Waycross, Georgia has completed an update to the 1992-2011 Solid Waste Management Plan for The City of Waycross; and

WHEREAS, The City of Waycross, Georgia has complied with the Rules of Georgia Department of Community Affairs Minimum Planning Standards and Procedures for Solid Waste Management (Chapter 110-4-3) including public participation requirements;

NOW, THEREFORE, BE IT RESOLVED by the City of Waycross City Commission that the document entitled City of Waycross Solid Waste Management Plan Update 2008 may be sent to the Southeast Georgia Regional Development Center and the Georgia Department of Community Affairs for review and approval.

SO RESOLVED, this 6 day of May, 2008.

CITY OF WAYCROSS

BY:

ATTEST:

1 1 th 1/01

CITY OF WAYCROSS, GEORGIA

DEPARTMENT OF COMMUNITY IMPROVEMENT



May 7, 2008

Southeast Georgia Regional Development Center Attn: Ms. Janice McKinnon, Planning Director 1725 South Georgia Parkway, West Waycross, GA 31501

Dear Ms. McKinnon:

It is my pleasure to present to you for review the City of Waycross' update to the Solid Waste Management Plan. This plan was completed for only the City of Waycross and not a joint plan with Ware County, Georgia. The transmittal resolution is included as it was officially approved for transmittal by the Waycross City Commission on May 6, 2008.

If there are any questions or concerns with this document, I may be reached at 912-287-2944.

Sincerely

onathan H. Lynn, Director

Community Improvement Department



November 3, 2008

Honorable Clarence Billups Mayor, City of Waycross Post Office Box 99 417 Pendleton Street Waycross, Georgia 31512

Dear Mayor Billups:

We have received notification that the City of Waycross has adopted the 2008 - 2018 Solid Waste Management Plan that meets the Minimum Planning Standards and Procedures for Solid Waste Management. Accordingly, it is my pleasure to notify you that the City of Waycross remains eligible for solid waste permits, grants and loans.

As you have experienced, in addition to proper and thorough long-range planning, effective solid waste management requires the ability to adapt when circumstances indicate that such action is necessary. Through continued review, and revision when necessary, solid waste planning provides your local government with more control over its destiny and assists you in dealing more effectively with both short-term and long-term management decisions.

We commend you for your hard work and dedication. If you have any questions regarding your solid waste management plan, please call John Karrh in our Office of Environmental Management at (912) 489-3483.

Sincerely,

Mike Beatty

Commissioner

MB/jk

cc: Lace Futch, Executive Director, Southeast Georgia RDC





October 1, 2008

Mr. Lace Futch, Executive Director Southeast Georgia Regional Development Center 1725 South Georgia Parkway, West Waycross, Georgia 31503

Dear Lace:

Our staff has reviewed the revised information for the 2008 – 2018 Solid Waste Management Plan for the City of Waycross. The revisions have brought the plan into compliance with the Minimum Planning Standards and Procedures for Solid Waste Management. To regain eligibility for solid waste permits, grants, and loans, the City of Waycross must adopt the 2008 – 2018 Solid Waste Management Plan as soon as possible.

In order to complete the planning cycle, please forward a copy of the adoption resolutions along with a copy of the revised adopted Solid Waste Management Plan to our office. Once we receive these documents, we will send notification to the City of Waycross of their renewed eligibility for solid waste grants, loans, and permits.

Sincerely,

Mike Gleaton, Assistant Commissioner Planning and Environmental Division

MG/jk





June 17, 2008

Mr. Lace Futch, Executive Director, Southeast Georgia Regional Development Center 1725 South Georgia Parkway, West Waycross, Georgia 31503

Dear Lace:

Our staff has reviewed the Solid Waste Management Plan for the City of Waycross received by our office on May 14, 2008. We are unable to approve the plan at this time for the following reasons:

- Please expand Waste Stream Analysis to cover the ten year planning period through 2018;
- Include an inventory of source reduction programs, composting and yard trimming programs and special management items in the Waste Reduction Element;
- Please include a description of Southland's contingency collection strategy, the City's response if Southland goes out of business and length of time necessary to bring contingency collection plan on-line in the Collection Element;
- Length of time necessary to bring contingency disposal plan on-line in the Disposal Element;
- Description of disaster debris management and how public will be notified;
- Please include description and how the City will handle each Land Limitation Element item;
- Include a procedure the local government will follow in determining if a proposed facility (public or private) is consistent with the Solid Waste Management Plan in the Land Limitation Element;
- Include and inventory and assessment of education / involvement programs as part of the Education and Public Involvement Element;
- Please include Needs and Goals at the end of each Element;
- Recap Needs and Goals and expand Implementation Strategy through 2018 in Implementation Section.

The following are advisory comments only:

 The Georgia legislature revised the state reduction goal from a 25% per capita waste disposal reduction rate to a goal "that every effort be undertaken to reduce on a state-wide per capita basis the amount of municipal solid waste being received at disposal facilities." Each jurisdiction is strongly encouraged to create its own reduction goal.

Please forward these comments to the City of Waycross. When the required changes are addressed we will complete our review of the Solid Waste Management Plan. If you have any questions, please contact John Karrh at (912) 489-3483 or at ikarrh@dca.state.ga.us.

Sincerely,

Mike Geaton, Assistant Commissioner

Planning and Environmental Management Division

MG/jk



